

CLASSIFICATION GUIDE

DEP8056/01/06

401 KAR 42:080

Instructions: Circle the correct answer to each applicable question in both the soil and groundwater guides and complete the verification section.

SOIL

This guide places each site into a particular class and establishes allowable levels in soil. All other requirements for classification purposes are contained in the Classification Outline (January 2006).

1. Are three (3) UST systems or fewer present at the site?	Yes No	Proceed to question No. 2. Proceed to question No. 17.
2. Have there been more than three (3) UST systems on-site since December 22, 1988?	Yes No	Proceed to question No. 17. Proceed to question No. 3.
3. Is the combined total capacity of all UST systems present on-site since December 22, 1988 less than 6000 gallons?	Yes No	Proceed to question No. 4. Proceed to question No. 17.
4. Were the UST systems taken out of service and empty prior to December 22, 1988? (See Section 1.3, page 3)	Yes No	Proceed to question No. 5. Proceed to question No. 17.
5. Is permanent closure to be performed by closure in place?	Yes No	Proceed to question No. 20. Proceed to question No. 6.
6. Are any domestic use wells, springs, cisterns, or well head protection areas located within a 100-meter (328 feet) radius from the excavation zone?	Yes No	Proceed to question No. 32. Proceed to question No. 7.
7. Are any environmentally sensitive features located within a 100-meter (328 feet) radius from the excavation zone?	Yes No	Proceed to question No. 8. Proceed to question No. 9.
8. Are environmentally sensitive features, located within a 100-meter (328 feet) radius from the excavation zone, hydrogeologically upgradient from the excavation zone?	Yes No	Proceed to question No. 9. Proceed to question No. 21.
9. Was clear evidence of a UST system release observed within the excavation zone or excavated materials? (See Section 1.7, page 3)	Yes No	Proceed to question No. 17. Proceed to question No. 10.
10. Has surficial evidence of a subsurface UST system release been observed outside of the excavation within a 150-meter (492 feet) radius from the excavation zone?	Yes No	Proceed to question No. 32. Proceed to question No. 11
11. Was water encountered within the excavation zone?	Yes No	Proceed to question No. 12. Proceed to question No. 15.
12. Was evidence of a UST system release observed in the water encountered within the excavation zone? (See Section 2.0, page 3)	Yes No	Proceed to question No. 13. Proceed to question No. 15.
13. Does the water encountered within the excavation zone meet the definition of groundwater as defined in 401 KAR 42:005?	Yes No	Proceed to question No. 14. Proceed to question No. 15. (This water shall be disposed of properly.)
14. Does analysis of samples collected from the groundwater within the excavation zone indicate levels above those specified in Groundwater Table I? (See page 27)	Yes No	Closure under Class I disallowed. Proceed to question No. 20. Proceed to question No. 15.
15. Was potential evidence of a UST system release observed in the excavated materials (unidentified staining, odors, etc.)?	Yes No	Proceed to question No. 16. Site meets the requirements for closure under Class I.
16. Does analysis of samples collected from the excavated materials indicate levels above those specified in Soil Table 3?	Yes No	Proceed to question No. 17. Site meets the requirements for closure under Class I.
17. Have external leak detection devices been in operation over the life of the UST system? (See Section 1.2, page 5)	Yes No	Proceed to question No. 18. Proceed to question No. 20.
18. Have leaks or UST system releases been detected over the life of the system?	Yes No	Proceed to question No. 20. Proceed to question No. 19.

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19. Was evidence of a UST system release observed within the excavation zone? (See Section 1.4, page 5)	Yes No	Proceed to question No. 20. Site meets the requirements for closure under Class II.
20. Are any domestic use wells, springs, cisterns, or well head protection areas located within a 100-meter (328 feet) radius from the excavation zone?	Yes No	Proceed to question No. 32. Proceed to question No. 21.
21. Are any environmentally sensitive features located within a 50-meter (164 feet) radius from the excavation zone?	Yes No	Proceed to question No. 22. Proceed to question No. 23.
22. Have environmentally sensitive features, located within a 50-meter (164 feet) radius from the excavation zone, been documented to be hydrogeologically upgradient from the excavation zone?	Yes No	Proceed to question No. 23. Proceed to question No. 32.
23. Has surficial evidence of a subsurface UST system release been observed outside of the excavation within a 150-meter (492 feet) radius from the excavation zone?	Yes No	Proceed to question No. 32. Proceed to question No. 24.
24. Have fumes been detected inside buildings within a 150-meter (492 feet) radius from the excavation zone?	Yes No	Proceed to question No. 32. Proceed to question No. 25.
25. Are any of the following conditions present? Circle the preceding number of those that apply. 1. The site is located in a carbonate bedrock setting, as determined through a geologic quadrangle map analysis. (See page 15, Section 5.1 for a detailed description of this geologic setting.) 2. Domestic use wells, springs, cisterns, or well head protection areas are located within a 100- to 300-meter (328 feet to 984 feet) radius from the excavation zone. 3. Environmentally sensitive features are located within a 50- to 150-meter (164 feet to 492 feet) radius from the excavation zone and are hydrogeologically downgradient from the excavation zone. 4. Groundwater is encountered in the excavation zone or piping trench excavation, or borings as required for closure in place and active UST systems. 5. Groundwater is not encountered within the excavation zone or piping trench excavation, or borings as required for closure in place and active UST systems, and documentation has not been submitted to demonstrate that groundwater is at a depth of more than 30 feet from the surface. 6. Water supply lines, sanitary sewer lines, storm sewer lines, or telephone manvaults are located within a 50 meter (164 feet) radius from the excavation zone.	Yes No	Proceed to question No. 26. Proceed to question No. 28.
26. Has consent from all off-site affected property owners been obtained and documentation submitted so that the Point of Compliance requirements in Class are not applicable?	Yes No	Soil on and off-site shall be remediated to Class III Soil Table 1 levels. Proceed to question No. 27.
27. Does analysis of soil samples collected from the excavation zone indicate levels above those specified in Class III Soil Table 1?	Yes No	Soils within the Point of Compliance shall be remediated to achieve Class III Soil Table 1 levels. Any soil levels above Class III Soil Table 1 levels which are outside of the Point of Compliance shall be remediated to the appropriate Class IV Soil Matrix Table levels. (See Section 6.2, p. 9) Site meets the requirements for Class III closure.

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28.	Have all of the following been established? Domestic use wells, springs, cisterns, or well head protection areas are located beyond a 300-meter (984 feet) radius from the excavation zone. Environmentally sensitive features are located beyond a 150-meter (492 feet) radius from the excavation zone, or are sufficiently determined to be hydrogeologically upgradient from the excavation zone. Site-specific information is submitted to demonstrate that groundwater is at a depth of more than 30 feet from the surface. Soil samples collected at the nearest hydrogeologically downgradient Point of Compliance, indicate levels below those specified in Class III Soil Table 1.	Yes No	Proceed to question No. 29. Proceed to question No. 26.
29.	Has consent from all off-site affected property owners been obtained and documentation submitted so that the Point of Compliance requirements in Class III are not applicable?	Yes No	Soil on and off-site shall be remediated to Class III Soil Table 2 levels. Proceed to question No. 30
30.	Do analyses of soil samples collected at the nearest hydrogeologically downgradient Point of Compliance indicate levels below those specified in Class III Soil Table 1. (See Section 8.0, page 9)	Yes No	Proceed to question No. 31. Soils within the Point of Compliance shall be remediated to achieve Class III Soil Table 1 standards. Any levels in soil above Class III Soil Table 1 which are outside of the Point of Compliance shall be remediated to the appropriate Class IV Soil Matrix Table standards. (See Section 9.2, p. 10)
31.	Does analysis of soil samples collected from the excavation zone indicate levels above those specified in Class III Soil Table 2?	Yes No	Soils shall be remediated to achieve Class III Soil Table 2 standards. (See note below) Site meets the requirements for Class III closure.
32.	Has consent from all off-site affected property owners been obtained and documentation submitted so that the Point of Compliance requirements in Class IV are not applicable?	Yes No	Soil on and off-site shall be remediated to achieve the appropriate Class IV Soil Matrix Table levels. Proceed to question No. 33.
33.	Do the prescribed Class IV Soil Matrix Table levels exceed those specified in Class III Soil Table 1?	Yes No	Proceed to question No. 34. Proceed to question No. 35.
34.	Are levels exceeding those specified in Class III Soil Table 1 present at the Point of Compliance?	Yes No	Soils within the Point of Compliance shall be remediated to the applicable Class IV Soil Matrix Table levels. Soils outside of the Point of Compliance shall be remediated to the appropriate Class IV Soil Matrix Table levels (See Section 8.0, p.15) Proceed to question No. 35.
35.	Does analysis of soil samples collected from the excavation zone indicate levels above those specified in the applicable Class IV Soil Matrix Table?	Yes No	Soils within the Point of Compliance shall be remediated to achieve the appropriate Class IV Soil Matrix Table standards. Site meets the requirements for Class IV closure.

NOTE: Residual soil and/or groundwater levels above those specified in the applicable table will be allowed for closure only if a supplemental risk assessment, permit as a residual landfill, or monitor only plan is submitted and accepted by the Division in the form of a Corrective Action Plan (see Corrective Action Plan Outline, 401 KAR 42:060).

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GROUNDWATER

This guide shall be used to establish allowable levels in groundwater for UST facilities in Class III or Class IV.

1. Was any water encountered within the excavation zone, borings, monitoring wells, or assessment wells?	Yes No	Proceed to question No. 3. Proceed to question No. 2.
2. Was any water encountered within the assessment one (1) meter below the bottom of a dry excavation? See Section 4.2 of 401 KAR 42:070	Yes No	Proceed to question No. 3. Proceed to question No. 4.
3. Does this water meet the definition of groundwater as defined in 401 KAR 42:005?	Yes No	Proceed to question No. 7. Proceed to question No. 4.
4. Was bedrock encountered within the excavation zone which prevented the collection of a composite soil sample from the bottom of the excavation?	Yes No	Proceed to question No. 6. Proceed to question No. 5.
5. Were allowable soil levels achieved prior to reaching the soil/bedrock interface?	Yes No	Site is not required to assess groundwater. Proceed to question No. 6.
6. Were groundwater samples collected in the hydrogeologically downgradient area most likely to be effected by a UST system release?	Yes No	Proceed to question No. 7. Provide documentation to explain failure to assess groundwater.
7. Is the site serviced by a public water supply?	Yes No	Proceed to question No. 8. Proceed to question No. 9.
8. Has groundwater been encountered at, or less than, 3.0 meters from the ground surface?	Yes No	Groundwater shall be remediated to achieve Groundwater Table I levels. Proceed to question No. 10.
9. Is the affected groundwater a current or potential source for domestic use? (See Groundwater Section 4.3 on page 24 of this outline.)	Yes No	Proceed to question No. 11. Proceed to question No. 10.
10. Are domestic use wells, springs, cisterns, or well head protection areas located within a 300-meter (984 feet) radius from the excavation zone?	Yes No	Proceed to question No. 11. Proceed to question No. 12.
11. Does analysis of groundwater samples indicate levels above those specified in Groundwater Table I?	Yes No	Groundwater shall be remediated to achieve Groundwater Table I levels. Groundwater Table I applies but no further assessment of groundwater is necessary.
12. Does analysis of groundwater samples indicate levels above those specified in Groundwater Table II?	Yes No	Proceed to question No. 13. Groundwater Table II applies; further assessment of groundwater may not be necessary but Groundwater Sections 5 and 6 of this outline shall be addressed.
13. Were groundwater samples collected in a hydrogeologically downgradient direction from the excavation zone at, or as close as possible to, the Point of Compliance?	Yes No	Proceed to question No. 14. Provide documentation to explain failure to assess groundwater.
14. Does analysis of the hydrogeologically downgradient groundwater indicate levels below those specified in Groundwater Table I?	Yes No	Groundwater shall be remediated to Groundwater Table II levels within the Point of compliance. Groundwater shall be remediated to Groundwater Table II levels within the Point of Compliance, and Groundwater Table I levels outside of the Point of Compliance.

NOTE: Residual soil and/or groundwater levels above those specified in the applicable table will be allowed for closure only if a supplemental risk assessment, permit as a residual landfill, or monitor only plan is submitted and accepted by the Division in the form of a Corrective Action Plan (see Corrective Action Plan Outline, 401 KAR 42:060).

VERIFICATION OF SITE CLASSIFICATION

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OWNER NAME: _____

SITE NAME: _____

AGENCY INTEREST NUMBER: _____

SOIL GUIDE

I CERTIFY THAT THIS SITE MEETS THE CRITERIA TO CLOSE UNDER:
(CHECK APPLICABLE CLASS)*

_____ CLASS I

_____ CLASS II

_____ CLASS III

_____ CLASS IV

* The Classification Guide indicates that Class _____ is applicable for this site. However, a release from the UST system has been documented to have no potential impact on identified environmentally sensitive features, domestic-use wells, springs, or cisterns (provide documentation). Therefore, this facility shall be classified as Class _____.

THIS SITE HAS RESIDUAL LEVELS IN EXCESS OF THOSE SPECIFIED IN THE APPLICABLE SOIL OR GROUNDWATER TABLE(S).
(CHECK APPROPRIATE RESPONSE)

_____ YES

_____ NO

I CERTIFY THAT, THROUGH AN ACCURATE COMPLETION OF THE CLASSIFICATION GUIDE (SOIL), THE ALLOWABLE SOIL LEVELS WITHIN THE POINT OF COMPLIANCE FOR THIS SITE ARE SPECIFIED IN:
(CHECK APPLICABLE TABLE)

_____ CLASS III SOIL TABLE 1

_____ CLASS III SOIL TABLE 2

_____ CLASS IV SOIL MATRIX TABLE I (FILL IN BLANKS)

SOIL TYPE: _____, DEPTH TO GROUNDWATER: _____, DISTANCE (0-100, 100-300, OR >300): _____.

_____ CLASS IV SOIL MATRIX TABLE II (FILL IN BLANKS)

SOIL TYPE: _____, DEPTH TO GROUNDWATER: _____, DISTANCE (0-100, 100-300, OR >300): _____.

_____ CLASS IV SOIL MATRIX TABLE III (FILL IN BLANKS)

SOIL TYPE: _____, DEPTH TO GROUNDWATER: _____, DISTANCE (0-100, 100-300, OR >300): _____.

_____ DOES NOT APPLY (CLASS I OR CLASS II)

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THIS SITE HAS OBTAINED WRITTEN CONSENT FROM ALL OFF-SITE AFFECTED PROPERTY OWNERS TO DETERMINE THAT THE POINT OF COMPLIANCE REQUIREMENTS ARE NOT APPLICABLE. (CHECK APPROPRIATE RESPONSE)

_____ YES

_____ NO

I CERTIFY THAT, THROUGH AN ACCURATE COMPLETION OF THE CLASSIFICATION GUIDE (SOIL), THE ALLOWABLE SOIL LEVELS OUTSIDE OF THE POINT OF COMPLIANCE FOR THIS SITE ARE SPECIFIED IN:
(CHECK APPLICABLE TABLE)

_____ **CLASS III TABLE 1**

_____ **CLASS III TABLE 2**

_____ **CLASS IV SOIL MATRIX TABLE I (FILL IN BLANKS)**

SOIL TYPE: _____, DEPTH TO GROUNDWATER: _____.

_____ **CLASS IV SOIL MATRIX TABLE II (FILL IN BLANKS)**

SOIL TYPE: _____, DEPTH TO GROUNDWATER: _____.

_____ **CLASS IV SOIL MATRIX TABLE III (FILL IN BLANKS)**

SOIL TYPE: _____, DEPTH TO GROUNDWATER: _____.

_____ **DOES NOT APPLY, SOIL LEVELS EXCEEDING THOSE ALLOWED ARE NOT PRESENT AT OR BEYOND THE POINT OF COMPLIANCE**

GROUNDWATER GUIDE

I CERTIFY THAT, THROUGH AN ACCURATE COMPLETION OF THE CLASSIFICATION GUIDE (GROUNDWATER), THE ALLOWABLE LEVELS IN GROUNDWATER WITHIN THE POINT OF COMPLIANCE FOR THIS SITE ARE SPECIFIED IN:
(CHECK APPLICABLE GROUNDWATER TABLE)*

_____ GROUNDWATER TABLE I

_____ GROUNDWATER TABLE II

_____ DOES NOT APPLY (GROUNDWATER NOT ENCOUNTERED)

* The Classification Guide indicates that Groundwater Table _____ is applicable for this site. However, a release from the UST system has been documented to have no potential impact on identified environmentally sensitive features, domestic-use wells, springs, or cisterns (provide documentation). Therefore, this facility shall be classified as Groundwater Table _____.

LEVELS EXCEEDING THOSE SPECIFIED IN GROUNDWATER TABLE I ARE:(CHECK APPLICABLE RESPONSE)

_____ PRESENT AT OR BEYOND THE POINT OF COMPLIANCE

_____ NOT PRESENT AT OR BEYOND THE POINT OF COMPLIANCE

_____ DOES NOT APPLY (GROUNDWATER NOT ENCOUNTERED)

I CERTIFY THAT THE SURFACE WATER STANDARDS SPECIFIED IN 401 KAR 5:031 HAVE BEEN ADDRESSED.

CONTINUED ON NEXT PAGE FOR APPROPRIATE SIGNATURES

CLASSIFICATION CERTIFICATION:

Under the requirements of KRS Chapter 322 and 322A, this Classification Guide shall be completed and signed by a PE registered with the Kentucky Board of Registration for Professional Engineers and Land Surveyors or a PG registered with the Kentucky Board of Registration for Professional Geologists.

I, THE UNDERSIGNED, STATE, UNDER PENALTY OF LAW, THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS, AND THAT BASED ON MY INQUIRY OF THOSE INDIVIDUALS RESPONSIBLE FOR OBTAINING THE INFORMATION, I CERTIFY THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE.

Name and Title (Type or Print):

Signature/Date:

Registration Number, Date and Seal:

